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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,459

Applicant(s)

UHLIR ET AL.

Examiner

Phuong-Thao Cao

Art Unit

2164

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-41 and 43-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-41 and 43-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This action is in response to Amendment/RCE filed on 10/12/2010.
2. Claims 22, 34, 35, 48 and 51 have been amended and claims 1-21 and 42 were previously cancelled. Currently, claims 22-41 and 43-52 are pending.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/2010 has been entered.

Response to Arguments

4. Applicant's arguments with respect to claims 22-41 and 43-52 have been considered but are moot in view of the new ground(s) of rejection.

Specification

5. Specification, page 1 under section "REFERENCE TO RELATED APPLICATIONS" is rejected as including personal/individual information (e.g., Attorney docket number). Applicant should remove all the Attorney docket number and replace with the respective application number to identify each related application.

Claim Objections

6. Claims 44 and 47 is objected to because of the following informalities:

Regarding claim 44, the recited "end users computing platforms" in line 2 and line 3 should be changed to "end user computing platforms".

Regarding claim 47, the recited "The method of Claim 34" should be amended as "The computer-readable medium of Claim 34" since claim 34 is a "medium" claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 22-52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 22, 34, 35, 48 and 51, the newly added limitation “wherein the play scenario corresponds to a virtual position for display on a user interface in which the virtual position is independent of a user’s actual physical location” is not disclosed in the specification.

Other dependent claims are rejected as incorporating the deficiencies of the rejected independent claims upon which they depend respectively.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 35-41 and 43-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "suitable for use" in claim 35, line 10 is a relative term which renders the claim indefinite. The term "suitable for use" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear which and how an attribute is determined as suitable for use.

Other dependent claims are rejected as incorporating the deficiencies of claim 35 upon which they depend.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 22-24, 28-32 and 34 (effective conception date 1/21/2003, effective filing date 03/11/2004) is rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No 6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001) and Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997).

As to claim 22, Paulauskas et al. teaches:

“A computer implemented method for deriving at least two products from a source geographic database, the source geographic database comprising data representing real-world geographic features wherein the at least two products comprising a first dataset and a second dataset, the second dataset used for depicting a real geographic locale as part of a play scenario for a computer game” (see Paulauskas et al., [column 3, lines 35-55] wherein each storage medium with an appropriate data for a geographic region is interpreted as a product from the geographic data 70 (source) including information about one or more geographic regions or coverage areas; note that language “used for” suggests “intended uses” which have no patentable weight and require no demonstration in the art), the method comprising:

“extracting the first dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 42-50] wherein portion (e.g., some or all) of the geographic data can be broadly considered as a first dataset);

“writing the first dataset to a first computer-readable medium; (see Paulauskas et al., [column 3, lines 48-50]);

“providing the first dataset, wherein at least a portion of the first dataset is used in a real-world navigation system” (see Paulauskas et al., [column 4, lines 5-45]);

“extracting the second dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 42-50] wherein portion (e.g., some or all) of the geographic data can be broadly considered as a second dataset; also see [column 3, lines 53-55] wherein each storage medium with appropriate data for a geographic region represents a separate dataset);

“writing the second dataset to a second computer-readable medium” (see Paulauskas et al., [column 3, lines 53-55] wherein each storage medium with appropriate data for a geographic region represents a separate dataset); and

“providing the second dataset, wherein at least a portion of the second dataset is used in a computer-game system” (see Paulauskas et al., [column 9, lines 56-62]).

However, Paulauskas et al. does not teach:

“wherein the second dataset is used in computer games that depict real geographic locales as part of play scenarios of the computer games, the play scenario including a predetermined theme that governs game play of the computer game in a preset storyline, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location”.

On the other hand, Trovato teaches:

“wherein the second dataset is used in computer games that depict real geographic locales as part of play scenarios of the computer games, the play scenario including a predetermined

theme that governs game play of the computer game, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user's actual physical location" (see Trovato, [column 2, lines 10-40] and [column 3, lines 25-30] wherein electronic map data provided to environment grower is interpreted as second dataset, and environments (e.g., simulated city) created based on real word data (i.e., electronic maps) and used in games is interpreted as real geographic locales as part of play scenarios as recited; also see [column 3, lines 4-6] and Fig. 4 for building multiple games in the same environment (i.e., simulated city) wherein each game must have game rules which govern how to play the game wherein game rules is interpreted as equivalent to theme of the play scenario; and wherein position in the simulated city is different or independent of the physical location of the user who plays the game in the simulated city).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Trovato into Paulauskas et al.'s system. A skilled artisan would have been motivated to do so as suggested by Trovato in [column 2, lines 20-35] and [column 3, lines 4-6] that electronic maps digitized enough real world data to provide places for users to play and a rich environment (i.e., simulated city) to build multiple games.

However, Paulauskas et al. and Trovato do not explicitly teach the computer game includes a preset storyline.

On the other hand, Streets of SimCity teaches the computer game includes a preset storyline (see Streets of SimCity, page 2 for different play modes and different level of difficulty available in Players' Choice wherein each play modes or play levels represents a preset storyline).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Streets of SimCity into Paulauskas et al.'s system (as modified by Trovato). An ordinarily skilled artisan would have been motivated to do so as suggested by Streets of SimCity game which is a car racing and fighter game played/build in a simulated city in order to develop a car chasing or fight game in the simulated city created from the real-world geographical data as disclosed in Trovato. In addition, a computer game having a preset storyline will be more interested and attracted to players.

As to claim 23, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“wherein the real-world navigation system is selected from a group consisting of: in-vehicle navigation systems, hand-held portable navigation system, personal computers, personal digital assistants, pagers, and telephones” (see Paulauskas et al., [column 2, lines 30-43]).

As to claim 24, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“wherein using at least a portion of the first dataset in a real-world navigation system comprises providing a service selected from a set consisting of route calculation, route guidance, vehicle positioning, map display, and electronic yellow pages” (see Paulauskas et al., [column 3, lines 1-15] and [column 4, lines 15-26]).

As to claim 28, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“combining at least a portion of the second dataset with a computer-game component selected from a set consisting of: characters, game logic, vehicles, game rules, rendering logic, and graphic logic” (see Paulauskas et al., [column 4, lines 58-62] for combining geographic data with game rules).

As to claim 29, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“providing at least a portion of the second dataset to each of a plurality of end-user computing platforms” (see Trovato, [column 1, lines 55 to column 2, line 5] for a network of computers wherein different user systems is interpreted as a plurality of user computing platforms); and

“on each of the plurality of end-user computing platforms, using at least a portion of second dataset to represent geographic features in a play scenario of a computer game” (see Trovato, [column 1, lines 55 to column 2, line 50] for disclosure of a network game including a game environment (e.g., a simulated city), wherein in order to display geographic features (i.e., streets of the city) as Fig. 4, on a user computer system, data from server must be provided to the user/client systems).

As to claim 30, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“accessing the second set of data using an application programming interface” (see Paulauskas et al., [column 6, lines 15-20] wherein the game application must obtain data from the geographic database through an application programming interface).

As to claim 31, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“accessing the second set of data using a spatial query” (see Paulauskas et al., [column 8, lines 27-30] and [column 9, lines 20-30] wherein query based on location is interpreted as spatial query).

As to claim 32, this claim is rejected based on arguments given above for rejected claim 22 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“extracting data from the second set of data using spatial criteria” (see Paulauskas et al., [column 6, lines 15-25] wherein obtaining only sign text information along the route upon which the vehicle is traveling indicates the use of spatial criteria).

As to claim 34, Paulauskas et al. teaches:

“A computer-readable medium having computer-executable instructions stored thereon for performing a method for deriving at least two products from a source geographic database, the source geographic database comprising data representing real-world geographic features” (see Paulauskas et al., [column 3, lines 35-55] wherein each storage medium with an appropriate data for a geographic region is interpreted as a product from the geographic data 70 (source) including information about one or more geographic regions or coverage areas), the method comprising:

“extracting a first dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 42-50] wherein portion (e.g., some or all) of the geographic data can be broadly considered as a first dataset);

“writing the first dataset to a first computer-readable medium; (see Paulauskas et al., [column 3, lines 48-50]);

“providing the first dataset for use in supplying a navigation-related function in a real-world navigation system” (see Paulauskas et al., [column 4, lines 5-45]);

“extracting a second dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 42-50] wherein portion (e.g., some or all) of the geographic data can be broadly considered as a second dataset; also see [column 3, lines 53-55] wherein each storage medium with appropriate data for a geographic region represents a separate dataset);

“writing the second dataset to a second computer-readable medium” (see Paulauskas et al., [column 3, lines 53-55] wherein each storage medium with appropriate data for a geographic region represents a separate dataset);

“providing the second dataset and a geographic data tool for developing a computer game” (see Paulauskas et al., [column 4, lines 58-64] for providing geographical data (second dataset) and game applications (geographical data tool) for creating games); and

“wherein the geographic data tool set is configured to extract all data corresponding to a sub-area from the second dataset based on a location input” (see Paulauskas et al., Fig. 3 and [column 4, lines 58-63], in response to vehicle position input, a game application obtains geo data from database wherein game application can be interpreted as data tool set as recited).

However, Paulauskas et al. does not teach:

“providing the second dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of play scenarios of the computer games having a preset storyline, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location”.

On the other hand, Trovato teaches:

“providing the second dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of play scenarios of the computer games, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location” (see Trovato, [column 2, lines 10-40] and [column 3, lines 25-30] wherein electronic map data provided to environment grower is interpreted as second dataset, and environments (e.g., simulated city) created based on real word data (i.e., electronic maps) and used in games is interpreted as real geographic locales as part of play scenarios as recited; also see [column 3, lines 4-6] and Fig. 4 for building multiple

games in the same environment (i.e., simulated city) wherein each game must have game rules which govern how to play the game wherein game rules is interpreted as equivalent to theme of the play scenario; and wherein position in the simulated city is different or independent of the physical location of the user who plays the game in the simulated city).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Trovato into Paulauskas et al.'s system. A skilled artisan would have been motivated to do so as suggested by Trovato in [column 2, lines 20-35] and [column 3, lines 4-6] that electronic maps digitized enough real world data to provide places for users to play and a rich environment (i.e., simulated city) to build multiple games.

However, Paulauskas et al. and Trovato do not explicitly teach the computer game having a preset storyline.

On the other hand, Streets of SimCity teaches the computer game having a preset storyline (see Streets of SimCity, page 2 for different play modes and different level of difficulty available in Players' Choice wherein each play modes or play levels represents a preset storyline).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Streets of SimCity into Paulauskas et al.'s system (as modified by Trovato). An ordinarily skilled artisan would have been motivated to do so as suggested by Streets of SimCity game which is a car racing and fighter game played/build in a simulated city in order to develop a car chasing or fight game in the simulated city created from the real-world geographical data as disclosed in Trovato. In addition, a computer game having a preset storyline will be more interested and attracted to players.

14. Claims 25, 27 and 33 (effective conception date 1/21/2003, effective filing date 03/11/2004) are rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No 6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001) and Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997), and further in view of Koller et al. ("Virtual GIS: A Real-Time 3D Geographic Information System", IEEE: 1995).

As to claim 25, Paulauskas et al., Trovato and Street of SimCity teach all limitations as recited in claim 22.

However, Paulauskas et al., Trovato and Street of SimCity do not explicitly teach "combining at least a portion of the second dataset with a road-model dataset to provide a realistic visual appearance of roads; wherein the road-model dataset is separate from the source geographic database".

On the other hand, Koller et al. teaches "combining at least a portion of the second dataset with a road-model dataset to provide a realistic visual appearance of roads; wherein the road-model dataset is separate from the source geographic database" (see Koller et al., [page 96, column 1, paragraph 2] and [page 96, column 2, paragraph 4] for combining geographic information database (second dataset) and models of roads, trees, buildings, vehicles (road-model dataset)).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Koller et al. into Paulauskas et al.'s system (as

modified by Trovato and Street of SimCity). One having ordinary skill in the art would have found it motivated to do so to effectively provide realistic visual appearance of roads in the region, thereby improving the graphical representation of system. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

As to claim 27, Paulauskas et al., Trovato and Street of SimCity teach all limitations as recited in claim 22.

However, Paulauskas et al., Trovato and Street of SimCity do not teach “combining at least a portion of the second dataset with a 3D-model dataset to provide a realistic visual presentation of a feature selected from a set consisting of: polygon-shape features, cityscape features, landscape features, buildings, fences, trees, shrubbery, lawns, and clouds; wherein the 3D-model dataset is separate from the source geographic database”.

On the other hand, Koller et al. teaches “combining at least a portion of the second dataset with a 3D-model dataset to provide a realistic visual presentation of a feature selected from a set consisting of: polygon-shape features, cityscape features, landscape features, buildings, fences, trees, shrubbery, lawns, and clouds; wherein the 3D-model dataset is separate from the source geographic database” (see Koller et al., [page 95, column 2, paragraph 2-4], [page 96, column 1, paragraph 2 and 3] and [page 96, column 2, paragraph 4] for combining geographic information database (second data set) with 3D models of shapes, trees, buildings, roads, waterways (3D-model dataset).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Koller et al. into Paulauskas et al.'s system

(as modified by Trovato and Streets of SimCity). A skilled artisan would have been motivated to do so in order to provide a realistic visual representation of features in the region thereby providing an effective way to build computer game scenes with more realistic views which plays a key role in attracting computer game users. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

As to claim 33, Paulauskas et al., Trovato and Street of SimCity teach all limitations as recited in claim 22.

However, Paulauskas et al., Trovato and Street of SimCity do not teach “filtering data from the second set of data to provide a desired level of accuracy”.

On the other hand, Koller et al. teaches “filtering data from the second set of data to provide a desired level of accuracy” (see Koller et al., [page 97, column 1, paragraph 3-5]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Koller et al. into Paulauskas et al.’s system (as modified by Trovato and Street of SimCity). A skilled artisan would have been motivated to do so to provide the computer game developers with a flexible and effective way to get only a set of data needed to render pictures with desired level of accuracy in their computer games. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

15. Claim 26 (effective conception date 1/21/2003, effective filing date 03/11/2004) is rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No

6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001), Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997) and Koller et al. (“Virtual GIS: A Real-Time 3D Geographic Information System”, IEEE: 1995), and further in view of Yang et al. (US Publication No 2002/0198694, publication date 12/26/2002).

As to claim 26, Paulauskas et al., Trovato, Street of SimCity and Koller et al. teach all limitations of claim 25.

However, Paulauskas et al., Trovato, Street of SimCity and Koller et al. do not explicitly teach:

“wherein the road-model dataset comprises a feature selected from a set consisting of: road-pavement colors, lane-stripe markings, curbs, sidewalks, signs, lampposts, land dividers, traffic signals, speed bumps, and crosswalks”.

On the other hand, Yang et al. teaches “wherein the road-model dataset comprises a feature selected from a set consisting of: road-pavement colors, lane-stripe markings, curbs, sidewalks, signs, lampposts, land dividers, traffic signals, speed bumps, and crosswalks” (see Yang et al., [0029]-[0030] and [0038] for road network objects including curbs, line, lane, traffic signals and signs).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Yang et al. into Paulauskas et al.’s system (as modified by Trovato, Street of SimCity and Koller et al.). A skilled artisan would have been motivated to do so in order to provide a realistic visual representation of roads with its related features thereby providing an effective way to build computer game scenes with more realistic

views which plays a key role in attracting computer game users as suggested by Yang et al., [0038].

16. Claims 35, 37, 41, 44-49, 51 and 52 (effective conception date 1/21/2003, effective filing date 03/11/2004) is rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No 6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001) and Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997), and further in view of Yang et al. (US Publication No 2002/0198694, publication date 12/26/2002).

As to claim 35, Paulauskas et al. teaches:

“A method of using a source database for forming derived products, wherein the source database contains data that represent geographic features in a region including roads in the region” ((see Paulauskas et al., [column 3, lines 35-55] wherein each storage medium with an appropriate data for a geographic region is interpreted as a product from the geographic data 70 (source) including information about one or more geographic regions or coverage areas), the method comprising:

“providing a first set of data from the source database to a first developer, the first set of data stored in a first computer-readable medium, wherein the first developer uses the first set of data in systems that provide navigation-related features, wherein the first set of data represents at least some of the geographic features in the region and further wherein the first set of data

includes attributes suitable for use for providing navigation-related functions” (see Paulauskas et al., [column 3, lines 43-47] and [column 4, lines 10-45]);

“providing a second set of data from the source database to a second developer and a geographical data tool set to a second developer, the second set of data stored in a second computer-readable medium, wherein the second developer uses the second set of data and the geographical data tool set to develop computer games” (see Paulauskas et al., [column 4, lines 58-62] for using geographic data (second set of data) by game application (geographical data tool set); note that any software using geographical data can be interpreted as geographical data tool set).

However, Paulauskas et al. does not teach:

“wherein the second dataset represents at least some of the geographic features in the region as part of play scenarios of the computer games including respective preset storylines, wherein a respective play scenario corresponds to a virtual position to display on a respective user interface in which the virtual position is independent of a user’s actual physical location”, and.

“wherein the geographic data tool set provides a spatial search function that retrieves data representing all road segments in a sub-area from the second set of data based on a location specific query that identifies the sub-area”.

On the other hand, Trovato teaches:

“wherein the second dataset represents at least some of the geographic features in the region as part of play scenarios of the computer games, wherein a respective play scenario corresponds to a virtual position to display on a respective user interface in which the virtual

position is independent of a user's actual physical location" (see Trovato, [column 2, lines 10-40] and [column 3, lines 25-30] wherein electronic map data provided to environment grower is interpreted as second dataset, and environments (e.g., simulated city) created based on real world data (i.e., electronic maps) and used in games is interpreted as real geographic locales as part of play scenarios as recited; also see [column 3, lines 4-6] and Fig. 4 for building multiple games in the same environment (i.e., simulated city) wherein each game must have game rules which govern how to play the game wherein game rules is interpreted as equivalent to theme of the play scenario; and wherein position in the simulated city is different or independent of the physical location of the user who plays the game in the simulated city).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Trovato into Paulauskas et al.'s system. A skilled artisan would have been motivated to do so as suggested by Trovato in [column 2, lines 20-35] and [column 3, lines 4-6] that electronic maps digitized enough real world data to provide places for users to play and a rich environment (i.e., simulated city) to build multiple games.

However, Paulauskas et al. and Trovato do not explicitly teach the computer game includes respective preset storylines.

On the other hand, Streets of SimCity teaches the computer game includes respective preset storylines (see Streets of SimCity, page 2 for different play modes and different level of difficulty available in Players' Choice wherein each play modes or play levels represents a preset storyline).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Streets of SimCity into Paulauskas et al.'s system

(as modified by Trovato). An ordinarily skilled artisan would have been motivated to do so as suggested by Streets of SimCity game which is a car racing and fighter game played/build in a simulated city in order to develop a car chasing or fight game in the simulated city created from the real-world geographical data as disclosed in Trovato. In addition, a computer game having a preset storyline will be more interested and attracted to players.

However, Paulauskas et al., Trovato and Streets of SimCity do not explicitly teach:

“wherein the geographic data tool set provides a spatial search function that retrieves data representing all road segments in a sub-area from the second set of data based on a location specific query that identifies the sub-area”.

On the other hand, Yang et al. teaches:

“wherein the geographic data tool set provides a spatial search function that retrieves data representing all road segments in a sub-area from the second set of data based on a location specific query that identifies the sub-area” (see Yang et al., [0035] for using spatial queries to collect/extract information about a region from the GIS database wherein a region is interpreted as equivalent to sub-area as recited).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Yang et al. into Paulauskas et al.’s system (as modified by Trovato and Street of SimCity). A skilled artisan would have been motivated to do so since both references (Paulauskas et al. and Yang et al.) teaches geographical data set and accessing data from geographical data set and using spatial queries as disclosed by Yang et al. provides an effective way to access data in Paulauskas et al. system.

As to claim 37, this claim is rejected based on arguments given above for rejected claim 35 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the second set of data is combined with road model data to provide a realistic visual appearance of roads in the region, wherein the road-model dataset comprises a feature selected from a set consisting of: road-pavement colors, lane-stripe markings, curbs, sidewalks, signs, lampposts, land dividers, traffic signals, speed bumps, and crosswalks” (see Yang et al., [0029]-[0030] and [0038] for road network objects including curbs, line, lane, traffic signals and signs).

As to claim 41, this claim is rejected based on arguments given above for rejected claim 35 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the second set of data is accessed using an application programming interface” (see Paulauskas et al., [column 6, lines 15-20] wherein the game application must obtain data from the geographic database through an application programming interface).

As to claim 44, this claim is rejected based on arguments given above for rejected claim 35 and is similarly rejected including the following:

Paulauskas et al., Trovato and Streets of SimCity teach:

“wherein the second set of data is provided to a plurality of end user computing platforms wherein the second set of data is used by computer games installed on the end users computing

platforms to represent at least some of the geographic features in the region as part of play scenarios of the computer games” (see Trovato, [column 1, lines 55 to column 2, line 5] for a network of computers); and [column 1, lines 55 to column 2, line 50] for disclosure a network of computers wherein different user systems is interpreted as a plurality of user computing platforms and a network game including a game environment (e.g., a simulated city), wherein in order to display geographic features (i.e., streets of the city) as Fig. 4, on each user computer system, data from server must be provided to the user/client systems).

As to claim 45, this claim is rejected based on arguments given above for rejected claim 35 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the second set of data is combined with other game-related components to form computer games” (see Paulauskas et al., [column 4, lines 58-63] for combining geographical data (second set of data) with game data).

As to claim 46, this claim is rejected based on arguments given above for rejected claim 35 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the second set of data is combined with a computer-game components to form the computer games, wherein the other game-related components include at least one of a group consisting of: characters, game logic, vehicles, game rules, rendering logic, and graphic logic”

(see Paulauskas et al., [column 4, lines 58-62] for combining geographic data with game rules; and see Trovato, [column 2, lines 35-65]).

As to claim 47, Paulauskas et al., Trovato and Street of SimCity teach all limitation as recited in claim 34. However, Paulauskas et al., Trovato and Street of SimCity do not explicitly teach:

“wherein the sub-area comprises a city, and wherein the location input includes identification of the city”.

On the other hand, Yang et al. teaches:

“wherein the sub-area comprises a city, and wherein the location input includes identification of the city” (see Yang et al., [0035] for using spatial queries to collect/extract information about a region from the GIS database wherein a region is interpreted as equivalent to city as recited).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Yang et al. into Paulauskas et al.’s system (as modified by Trovato and Street of SimCity). A skilled artisan would have been motivated to do so since both references (Paulauskas et al. and Yang et al.) teaches geographical data set and accessing data from geographical data set and using spatial queries as disclosed by Yang et al. provides an effective way to access data in Paulauskas et al. system.

As to claim 48, Paulauskas et al. teaches:

“A computer implemented method of using a source geographic database, the source geographic database comprising data representing real-world geographic features” (see Paulauskas et al., [column 1, lines 33-42]), the method comprising:

“extracting a first dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 43-46] wherein a portion is interpreted as dataset);

“writing the first dataset to a first computer-readable medium” (see Paulauskas et al., [column 3, lines 48-50]);

“providing the first dataset for use in supplying a navigation-related function in a real-world navigation system” (see Paulauskas et al., [column 3, lines 34-36]);

“extracting a second dataset from the source geographic database” (see Paulauskas et al., [column 3, lines 53-55] wherein each set of data for a geographic region represents a dataset from the geographic data/database);

“writing the second dataset to a second computer-readable medium” (see Paulauskas et al., [column 3, lines 53-55]).

However, Paulauskas et al. does not teach:

“providing the second dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of a play scenario of a preset storyline, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location”;

“wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial

query defining the selected area, and wherein the selected area is defined by a longitude and latitude point and a radial distance from the longitude and latitude point”.

On the other hand, Trovato teaches:

“providing the second dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of a play scenario, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location” (see Trovato, [column 2, lines 10-40] and [column 3, lines 25-30] wherein electronic map data provided to environment grower is interpreted as second dataset, and environments (e.g., simulated city) created based on real word data (i.e., electronic maps) and used in games is interpreted as real geographic locales as part of play scenarios as recited; also see [column 3, lines 4-6] and Fig. 4 for building multiple games in the same environment (i.e., simulated city) wherein each game must have game rules which govern how to play the game wherein game rules is interpreted as equivalent to theme of the play scenario; and wherein position in the simulated city is different or independent of the physical location of the user who plays the game in the simulated city).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Trovato into Paulauskas et al.’s system. A skilled artisan would have been motivated to do so as suggested by Trovato in [column 2, lines 20-35] and [column 3, lines 4-6] that electronic maps digitized enough real world data to provide places for users to play and a rich environment (i.e., simulated city) to build multiple games.

However, Paulauskas et al. and Trovato do not explicitly teach the computer game having a preset storyline.

On the other hand, Streets of SimCity teaches the computer game having a preset storyline (see Streets of SimCity, page 2 for different play modes and different level of difficulty available in Players' Choice wherein each play modes or play levels represents a preset storyline).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Streets of SimCity into Paulauskas et al.'s system (as modified by Trovato). An ordinarily skilled artisan would have been motivated to do so as suggested by Streets of SimCity game which is a car racing and fighter game played/build in a simulated city in order to develop a car chasing or fight game in the simulated city created from the real-world geographical data as disclosed in Trovato. In addition, a computer game having a preset storyline will be more interested and attracted to players

However, Paulauskas et al., Trovato and Street of SimCity do not explicitly teach:

"wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial query defining the selected area, and wherein the selected area is defined by a longitude and latitude point and a radial distance from the longitude and latitude point".

On the other hand, Yang et al. teaches:

"wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial query defining the selected area, and wherein the selected area is defined by a longitude and latitude point and a radial distance from the longitude and latitude point" (see Yang et al., [0033])

and [0035] for requesting data from GIS database using spatial queries and for query identifying roads with 2 miles (radial distance) from a landmark of interest (a longitude and latitude point)).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Yang et al. into Paulauskas et al.'s system (as modified by Trovato and Street of SimCity). A skilled artisan would have been motivated to do so in order to provide an effective way to access data from the geographic database. In addition, both references (Paulauskas et al. and Yang et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, geographical database, accessing and using geographical data. This close relation between both of the references highly suggests an expectation of success.

As to claim 51, Paulauskas et al. teaches:

"A method of facilitating development of computer games" (see Paulauskas et al., Abstract), the method comprising:

"extracting a dataset from a source geographic database" (see Paulauskas et al., [column 3, lines 43-45] for extracting a portion of geographic data),

"wherein the source geographic database includes data that represent roads in a road network in a real world geographic locale including geographic coordinates of positions of the roads, street names of the roads, address ranges along the roads, turn restrictions at intersections of the roads, road connectivity and road shape" (see Paulauskas et al., [column 4, lines 15-45]).

However, Paulauskas et al. does not teach:

“providing the dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of a play scenario including a preset storyline, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location”;

“wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial query defining the selected area”.

On the other hand, Trovato teaches:

“providing the second dataset and a geographic data tool set for developing a computer game that depicts a real geographic locale as part of a play scenario, wherein the play scenario corresponds to a virtual position to display on a user interface in which the virtual position is independent of a user’s actual physical location” (see Trovato, [column 2, lines 10-40] and [column 3, lines 25-30] wherein electronic map data provided to environment grower is interpreted as second dataset, and environments (e.g., simulated city) created based on real word data (i.e., electronic maps) and used in games is interpreted as real geographic locales as part of play scenarios as recited; also see [column 3, lines 4-6] and Fig. 4 for building multiple games in the same environment (i.e., simulated city) wherein each game must have game rules which govern how to play the game wherein game rules is interpreted as equivalent to theme of the play scenario; and wherein position in the simulated city is different or independent of the physical location of the user who plays the game in the simulated city).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Trovato into Paulauskas et al.’s system. A skilled

artisan would have been motivated to do so as suggested by Trovato in [column 2, lines 20-35] and [column 3, lines 4-6] that electronic maps digitized enough real world data to provide places for users to play and a rich environment (i.e., simulated city) to build multiple games.

However, Paulauskas et al. and Trovato do not explicitly teach the computer game having a preset storyline.

On the other hand, Streets of SimCity teaches the computer game having a preset storyline (see Streets of SimCity, page 2 for different play modes and different level of difficulty available in Players' Choice wherein each play modes or play levels represents a preset storyline).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Streets of SimCity into Paulauskas et al.'s system (as modified by Trovato). An ordinarily skilled artisan would have been motivated to do so as suggested by Streets of SimCity game which is a car racing and fighter game played/build in a simulated city in order to develop a car chasing or fight game in the simulated city created from the real-world geographical data as disclosed in Trovato. In addition, a computer game having a preset storyline will be more interested and attracted to players

However, Paulauskas et al., Trovato and Street of SimCity do not explicitly teach:

“wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial query defining the selected area”.

On the other hand, Yang et al. teaches:

“wherein the geographic data tool set is configured to request data representing all road segments in a selected area from the second dataset as a function of a spatial query, the spatial query defining the selected area” (see Yang et al., [0035] for requesting data about a particular region from GIS database using spatial queries).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Yang et al. into Paulauskas et al.'s system (as modified by Trovato and Street of SimCity). A skilled artisan would have been motivated to do so in order to provide an effective way to access data from the geographic database. In addition, both references (Paulauskas et al. and Yang et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, geographical database, accessing and using geographical data. This close relation between both of the references highly suggests an expectation of success.

As to claim 49, this claim is rejected based on arguments given above for rejected claim 51 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the selected area is defined by a longitude and latitude point and a radial distance from the longitude and latitude point” (see Yang et al., [0033] for query identifying roads within two miles (radial distance) from Washing Monument wherein each location is identified by a longitude and latitude point).

As to claim 49, this claim is rejected based on arguments given above for rejected claim 51 and is similarly rejected including the following:

Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach:

“wherein the computer game is a type selected from a group consisting of: a car chasing game and a “bot” fighter game” (see Streets of SimCity, first paragraph of page 1, for the teaching of Streets of SimCity game as a 1997 racing and vehicular combat computer game).

17. Claims 36, 38-40 and 43 (effective conception date 1/21/2003, effective filing date 03/11/2004) is rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No 6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001), Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997) and Yang et al. (US Publication No 2002/0198694, publication date 12/26/2002) and further in view of Koller et al. (“Virtual GIS: A Real-Time 3D Geographic Information System”, IEEE: 1995).

As to claims 36, Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach all limitations as recited in claim 35.

However, Paulauskas et al., Trovato, Street of SimCity and Yang et al. does not explicitly teach “combining at least a portion of the second dataset with a road-model dataset to provide a realistic visual appearance of roads; wherein the road-model dataset is separate from the source geographic database”.

On the other hand, Koller et al. teaches “combining at least a portion of the second dataset with a road-model dataset to provide a realistic visual appearance of roads; wherein the road-model dataset is separate from the source geographic database” (see Koller et al., [page 96, column 1, paragraph 2] and [page 96, column 2, paragraph 4] for combining geographic information database (second dataset) and models of roads, trees, buildings, vehicles (road-model dataset)).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Koller et al. into Paulauskas et al.’s system (as modified by Trovato and Street of SimCity and Street of SimCity). One having ordinary skill in the art would have found it motivated to do so to effectively provide realistic visual appearance of roads in the region, thereby improving the graphical representation of system. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

As to claims 38-40, Paulauskas et al., Trovato, Street of SimCity and Yang et. al. teach all limitations as recited in claim 35.

However, Paulauskas et al., Trovato, Street of SimCity and Yang et. al. do not teach “combining at least a portion of the second dataset with a 3D-model dataset to provide a realistic visual presentation of a feature selected from a set consisting of: polygon-shape features, cityscape features, landscape features, buildings, fences, trees, shrubbery, lawns, and clouds; wherein the 3D-model dataset is separate from the source geographic database”.

On the other hand, Koller et al. teaches “combining at least a portion of the second dataset with a 3D-model dataset to provide a realistic visual presentation of a feature selected

from a set consisting of: polygon-shape features, cityscape features, landscape features, buildings, fences, trees, shrubbery, lawns, and clouds; wherein the 3D-model dataset is separate from the source geographic database” (see Koller et al., [page 95, column 2, paragraph 2-4], [page 96, column 1, paragraph 2 and 3] and [page 96, column 2, paragraph 4] for combining geographic information database (second data set) with 3D models of shapes, trees, buildings, roads, waterways (3D-model dataset).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Koller et al. into Paulauskas et al.’s system (as modified by Trovato, Streets of SimCity and Yang et al.). A skilled artisan would have been motivated to do so in order to provide a realistic visual representation of features in the region thereby providing an effective way to build computer game scenes with more realistic views which plays a key role in attracting computer game users. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

As to claim 43, Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach all limitations as recited in claims 35.

However, Paulauskas et al., Trovato, Street of SimCity and Yang et al. do not teach “filtering data from the second set of data to provide a desired level of accuracy”.

On the other hand, Koller et al. teaches “filtering data from the second set of data to provide a desired level of accuracy” (see Koller et al., [page 97, column 1, paragraph 3-5]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Koller et al. into Paulauskas et al.’s system (as

modified by Trovato, Street of SimCity and Street of SimCity). A skilled artisan would have been motivated to do so to provide the computer game developers with a flexible and effective way to get only a set of data needed to render pictures with desired level of accuracy in their computer games. In addition, a suggestion of combination with Koller et al. is indicated in Trovato, [column 2, lines 20-35].

18. Claim 50 (effective conception date 1/21/2003, effective filing date 03/11/2004) is rejected under 35 U.S.C. 103(a) as being unpatentable over Paulauskas et al. (US Patent No 6,401,033 issued on 6/4/2002) in view of Trovato (US Patent No 6,183,364 issued on 2/6/2001), Street of SimCity (Wikipedia reference, Street of SimCity game released on 1997), and Yang et al. (US Publication No 2002/0198694, publication date 12/26/2002), and further in view of Halt et al. (US Patent No 6,343,301, patent date 1/29/2002).

As to claim 50, Paulauskas et al., Trovato, Street of SimCity and Yang et al. teach all limitations as recited in claim 51.

However, Paulauskas et al., Trovato, Street of SimCity and Yang et al. do not explicitly teach:

“wherein the selected area is defined by a rectangular having specified geographic boundaries”.

On the other hand, Halt et al. teaches:

“wherein the selected area is defined by a rectangular having specified geographic boundaries” (see Halt et al., [column 6, lines 12-30] and [column 10, lines 25-50]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to have incorporate the teaching of Halt et al. into Paulauskas et al.'s system (as modified by Trovato, Street of SimCity and Yang et al.). A skilled artisan would have been motivated to do so in order to provide an effective way to access data from the geographic database. In addition, both references (Paulauskas et al. and Halt et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, geographical database, accessing and using geographical data. This close relation between both of the references highly suggests an expectation of success.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Phuong-Thao Cao** whose telephone number is (571)272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Charles Rones** can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung T Vy/
Primary Examiner, Art Unit 2163

Phuong-Thao Cao, Examiner
Art Unit 2164
November 19, 2010

